



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,785	09/22/2000	James Longbottom	WEAT/0042	2355
36735 7590 04/28/2008 PATTERSON & SHERIDAN, L.L.P. 3040 POST OAK BOULEVARD, SUITE 1500 HOUSTON, TX 77056				
EXAMINER				
FRENEL, VANEL				
ART UNIT		PAPER NUMBER		
3687				
MAIL DATE		DELIVERY MODE		
04/28/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/668,785

Applicant(s)

LONGBOTTOM ET AL.

Examiner

VANEL FRENEL

Art Unit

3687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 50, 55, 69-86 and 93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 50, 55, 69-86 and 93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-884)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 20080311; 20080307; 20021104; 20010507

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the election of Group I filed on 2/6/08.

Claims 1-16, 50, 55, 69-86 and 93 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16, 50, 55, 69-86 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman (5,504,491), Tubel et al (5,730,219) in view of Alft et al (2004/0190374) and further in view of Devereaux et al (2007/0043843).

(A) As per claim 1, Chapman discloses a method of communicating between a drilling rig and at least one off-site location (Col.4, lines 33-67), the method comprising: providing a portable data communications module to a person on the drilling rig (See Tubel, Col.5, lines 4-67 to Col.6, line 42; Col.9, lines 29-67 to Col.10, line 67).

Chapman, Tubel do not explicitly disclose that the method having establishing an at least two-way data communication connection between the portable data communications module and the at least one off-site location via the Internet.

However, these features are known in the art, as evidenced by Alft. In particular, Alft suggests that the method having establishing an at least two-way data

communication connection between the portable data communications module and the at least one on-site location via the Internet (See Alft, Page 14, Paragraph 0130).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Alft within the combined teachings of Tubel, Chapman and Alft with the motivation of providing an earth penetrating apparatus for use with a boring machine, such as a horizontal directional drilling machine (See Alft, Page 2, Paragraph 0011).

In addition, as best understood, Chapman, Tubel and Alft do not explicitly disclose that the method having drilling a wellbore to an oil and/or gas bearing formation; and monitoring drilling activities on the drilling rig via the portable communications module and the at least two-way data communication connection by a person at the off-site location.

However, these features are known in the art, as evidenced by Devereaux. In particular, Devereaux suggests that the method having drilling a wellbore to an oil and/or gas bearing formation (See Devereaux, Page 2, Paragraph 0018); and monitoring drilling activities on the drilling rig via the portable communications module and the at least two-way data communication connection by a person at the off-site location (See Devereaux, Abstract, Page 2, Paragraphs 0015; 0018 and 0023).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Devereaux within the combined teachings of Alft, Tubel and Chapman with the motivation of providing a small wearable portable access unit (PAU) communicate s over high-rate link to a centrally-located network

access unit, called a general purpose node herein (See Devereaux, Page 1, Paragraph 0012).

(B) As per claim 2, Tubel discloses the method further comprising directing the activities at the drilling rig via the portable communications module and the at least two-way data communication connection by the off-site location (Col.5, lines 63-67 to Col.6, line 42).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(C) As per claim 3, Tubel discloses the method further comprising determining positional information of the person on the drilling rig and monitoring the positional information at the off site location (Col.8, lines 4-67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(D) As per claim 4, Tubel discloses the method wherein monitoring the activities comprise the sensing of conditions within a wellbore (Col.9, lines 45-67 to Col.10, line 67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(E) As per claim 5, Tubel discloses the method further comprising the person on the drilling rig performing a procedure related to the activities; and recording and billing the procedure (Col.19, lines 1-67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(F) As per claim 6, Tubel discloses the method, wherein monitoring the activities comprises diagnosing a problem with the activities (Col.19, lines 1-67; Col.21, lines 41-67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(G) As per claim 7, Tubel discloses the method wherein the activities comprise recovering at least a portion of a damaged or obstructed drill string in the wellbore (The Examiner interprets water 16 to the surface of the ocean floor 18 and then downwardly into formations under the ocean floor as a form of fishing activities Col.8, lines 64-67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(H) As per claim 8, Tubel discloses the method, wherein monitoring the activities comprises monitoring data transmitted from at least one sensor located in a wellbore (Col.8, lines 3-55).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(I) As per claim 9, Tubel discloses the method wherein the sensor in the wellbore gathers information related to the condition of the drill string (Col.18, lines 20-67).

The motivation for combining the respective teachings of Chapman, Tubel Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(J) As per claim 10, Alft discloses the method wherein further comprises providing a computer on the drilling rig, wherein the at least two-way data communication connection is established through the computer (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(K) As per claim 11, Chapman discloses the method wherein the positional information is determined by GPS equipment (Col. 4, lines 38-48).

(L) As per claim 12, Chapman discloses the method further comprising comparing a GPS signal to a database to automatically identify a source of the data transmission (Col.4, lines 49-67 to Col.5, line 43).

(M) As per claim 13, Tubel discloses the method wherein said portable communications module automatically utilizes the communication connection to transmit data including status, usage, and location to a rental center according to a predetermined schedule (Col.20, lines 13-67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(N) As per claim 14, Devereaux discloses the method wherein the portable communications module is worn by, or attached to, the person on the drilling rig. (Page.2, Paragraph 0023).

The motivation for combining the respective teachings of Chapman, Tubel , Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(O) As per claim 15, Tubel discloses the method wherein the portable communications module is detachably attached to a skull-protective hardhat that is worn by the person on the drilling rig (Col.23, lines 46-67 to Col.24, line 40).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(P) As per claim 16, Devereaux discloses the method wherein monitoring the activities comprises measuring or recording length of tubulars and the activities comprise assembling the tubulars to form a tubular string (Page 2, Paragraph 0023)

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(Q) A per claim 50 Alft discloses the method further comprising: communicating information relating to the activities from the drilling rig to the off-site person in response to instructions received from the off-site person (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(R) As per claim 55, Alft discloses the method further comprising recording usage data regarding the communications module (See Alft, Page 4, Paragraph 0049).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(S) As per claim 69, Alft discloses the method further comprising determining whether there is a request to establish a connection with the off-site person located at a specific off-site computer (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(T) As per claim 70, Alft discloses the method further comprising determining the specific off-site computer communications to establish the connection with (See Alft, Page 14, Paragraphs 0125-0127).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(U) As per claim 71, Alft discloses the method further comprising receiving positional information of the communications module (See Alft, Page 7, Paragraph 0076).

The motivation for combining the respective teachings of Chapman and Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(V) As per claim 72, Alft discloses the method wherein monitoring the activities comprises transferring input information from the communications module to the off-site location (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(W) As per claim 73, Alft discloses the method wherein monitoring the activities further comprises transferring instruction information from the off-site location to the communication module (See Alft, Page 14, Paragraphs 0125-0127).

The motivation for combining the respective teachings of Chapman, Tubel and Alft and Devereaux are as discussed above in the rejection of claim1, and incorporated herein.

(X) As per claim 74, Alft discloses the method wherein monitoring the activities further comprises following an operation, by the person at the drilling rig, indicated by the instruction information to obtain result information (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim1, and incorporated herein.

(Y) As per claim 75, Alft discloses the method wherein monitoring the activities further comprises transferring the result information from the communications module to the off-site location (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(Z) As per claim 76, Alft discloses the method wherein monitoring the activities further comprises analyzing the result information at the off-site location to make a determination (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(AA) As per claim 77, Alft discloses the method wherein monitoring drilling activities further comprises transferring the documentation from the off-site location to the communications module (See Alft, Page 14, Paragraph 0130).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(BB) As per claim 78, Tubel discloses the method further comprising drilling a wellbore to an oil and /or gas bearing formation (See Tubel, Col.18, lines 34-67; Col.19, lines 34-59).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(W) As per claim 79, Alft discloses the method wherein the connection is real-time (See Alft, Page 15, Paragraph 0134).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(X) As per claim 80, Alft discloses the method further comprising communicating one or more procedures from the off-site person to the person at the drilling rig (See Alft, Page 14, Paragraphs 0130-0132).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(Y) As per claim 81, Alft discloses the method wherein the one or more procedures comprise an assembly drawing, a picture of a part, a video of an installation procedure, or a training session (See Alft, Page 15, Paragraphs 0132-0134).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(Z) As per claim 82, Alft discloses the method wherein the one or more procedures comprise a schematic drawing of a part or machine, critical dimensions of a part or machine, or checklist or video clip showing how to use a part or machine (See Alft Page 15, Paragraphs 0132-0134).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(AA) As per claim 83, Alft discloses the method wherein the part or machine is a tong (Examiner interprets pump or motor to be a form of tong See Alft, Page 25, Paragraphs 0218-0219).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(BB) As per claim 84, Tubel discloses the method wherein the part or machine is fishing equipment (The Examiner interprets water 16 to the surface of the ocean floor 18 and then downwardly into formations under the ocean floor as a form of fishing activities See Col.8, lines 64-67).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(CC) As per claim 85, Alft discloses the method wherein the part or machine is a parameter measuring device (See Alft, Page 8, Paragraphs 0079-0080).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(DD) As per claim 86, Alft discloses the method further comprising the person at the drilling rig performing a task using the one or more procedures (See Alft, Page 8, Paragraphs 0082-0083).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

(EE) As per claim 93, Alft discloses the method wherein the activities are drilling activities (See Alft, Page 8, Paragraph 0080).

The motivation for combining the respective teachings of Chapman, Tubel, Alft and Devereaux are as discussed above in the rejection of claim 1, and incorporated herein.

Response to Arguments

4. Applicant's arguments filed 2/16/08 with respect to claims 1-16, 50, 55 and 69-86 and 93 have been fully considered but are moot in view of new ground (s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not the applied art teaches hand-free, portable computer and system (5,844,824) and system and method for communicating information associated with a drilling component (2001/0014966).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 571-272-6769. The examiner can normally be reached on Monday-Thursday from 6:30 am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on 571-272-3955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3687

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Vanel Frenel/
Primary Examiner, Art Unit 3687

April 22, 2008